

SECRET

PRIORITY

P 152356Z APR 69
FM NPIC WASHDC
TO RUEFHQA/HQS USAF WASHDC
RUEOJFA/DIA

1969 APR 16 00 42Z

BT

SECRET CITE NPIC 6100.
USAF FOR AFIGOS; DIA FOR DIAXX-2

REF: DIAXX-2 6164 APRIL 69

SUBJ: GIANT DRAGON MSN EVALUATIONS

1. IMAGE QUALITY: AT THE BEGINNING OF THE MISSION THE MASTER CAMERA IMAGERY IS OF SLIGHTLY LESS QUALITY THAN THAT PRODUCED BY THE SLAVE CAMERA. THE QUALITY OF BOTH RECORDS, HOWEVER, IS CONSIDERED TO BE FAIR. AFTER APPROXIMATELY 200 FRAMES THE QUALITY OF THE MASTER IMAGERY APPEARS TO HAVE IMPROVED SLIGHTLY BUT IS STILL CONSIDERED TO BE ONLY FAIR. IT REMAINS AT THIS QUALITY LEVEL THROUGH THE END OF THE MISSION. CONVERSELY, THE QUALITY OF THE IMAGERY PRODUCED BY THE SLAVE CAMERA APPEARS TO BECOME SLIGHTLY POORER AS THE MISSION PROGRESSES. AFTER APPROXIMATELY TWO-THIRDS OF THE WAY THROUGH THE MISSION, THIS TREND REVERSES ITSELF AND THE QUALITY GRADUALLY IMPROVES UNTIL THE ORIGINAL FAIR QUALITY IS

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REACHED AND MAINTAINED THROUGH THE END OF THE MISSION. IMAGE SMEAR IS APPARENT ON BOTH CAMERA RECORDS INTERMITTENTLY THROUGHOUT THE MISSION. IN ADDITION INSTANCES OF DOUBLE IMAGERY ARE PRESENT ON NUMEROUS SLAVE CAMERA FRAMES. IN GENERAL THE IMAGERY FROM BOTH CAMERA RECORDS HAS AN OUT OF FOCUS APPEARANCE THROUGHOUT THE MISSION AND IS NOT COMPARABLE TO THE GOOD QUALITY IMAGERY WHICH THIS SYSTEM CAN PROVIDE. THE IMAGE QUALITY VARIANCE EXPERIENCED THROUGHOUT THE MISSION POSSIBLY RESULTS FROM TEMPERATURE VARIATION WITHIN THE CAMERA BAY THAT OCCUR BECAUSE OF INSUFFICIENT TIME BETWEEN TAKE-OFF AND CAMERA OPERATION. (THE CAMERA MANUFACTURER RECOMMENDS A HOUR AND A HALF). THE AVERAGE GROUND RESOLUTION BY BOTH CAMERAS IS ESTIMATED TO BE FIVE FEET. THE BEST RESOLUTION PROVIDED BY BOTH CAMERAS IS ESTIMATED TO BE [REDACTED] CLOUD COVER AND HAZE OBSCURE APPROXIMATELY FIVE PERCENT OF THE ENTIRE MISSION.

2. MISSION DATA

- A. MISSION NUMBER: TW90
- B. DATE: 20 MARCH 69
- C. CAMERA NUMBERS
- (1) MASTER: I11

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(2) SLAVE: UNREADABLE, THE IMAGE IS HEAVILY BLOOMED.

- D. FLIGHT TIMES: T/OFF 0015Z C/ON 0037Z
- E. FILM: 3404
- F. EXPOSURE: 1/225
- G. APERTURE: F 3.5
- H. FILTER: MINUS BLUE
- I. PROCESSED BY: NOT AVAILABLE
- J. AVERAGE GAMMAS: NOT AVAILABLE

5. ORIGINAL NEGATIVES:

- A. EXPOSURE: THE EXPOSURE IS ADEQUATE ALTHOUGH THE DENSITY CHANGE FROM BEGINNING TO END INDICATES APPROXIMATELY A FULL F-STOP

DISTRIBUTION		
OFFICE	PI	
FILE		
PROVIDE SEC.		
PP&B/ED		
SECUR.		25X1
TSSG	APSD	✓
PSG/OC		
RRD		
REPRO		
AID		
ING		
PROD		
SCIEN		
WEST		
EAST		
M&S		
PGM		
IAS		
DIA-XX4		
SPAD		
DIA-12		
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SECRET

ADVANCE 64
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WASHDC
Commander's cert.
declassification

CHANGE IN EXPOSURE IS NEEDED TO COMPENSATE FOR THE DENSITY CHANGE.

B. DENSITY AND CONTRAST: THE DENSITY AND CONTRAST ARE ACCEPTABLE BUT BOTH INCREASE AS THE MISSION PROGRESSES.

C. IMAGE DEGRADATIONS:

(1) MASTER: FRAME 1, 1310, 1325 AND 1326 CONTAIN SPLASH TYPE FOG PATTERNS. A CONTINUOUS PLUS DENSITY STREAK IS PRESENT JUST WITHIN THE NON-TITLED EDGE OF THE FORMAT THROUGHOUT THE MISSION. THIS DENSITY STREAK MAY BE CAUSED BY 200 C.P.S. TIME TRACK LIGHT BEING CONTINUOUSLY ON.

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(2) SLAVE: FRAME 1 AND 1329 CONTAIN SPLASH TYPE FOG PATTERNS.

(3) BOTH: BANDING IS PRESENT ON THE FIRST TWO INCHES OF THE TAKE-UP END OF EACH FRAME.

D. PHYSICAL DEGRADATIONS

(1) MASTER: ONE MANUFACTURER'S SPLICE IS PRESENT IN THE MATERIAL.

(2) SLAVE: ONE MANUFACTURER'S SPLICE AND TWO HEAT SPLICES ARE PRESENT IN THE MATERIAL. FINE LONGITUDINAL EMULSION SCRATCHES ARE PRESENT THROUGHOUT.

E. AUXILIARY DATA: THE EVENTS COUNTER AND CAMERA SERIAL NUMBER ARE THE ONLY AUXILIARY DATA IMAGED. THE IMAGE OF THE SLAVE CAMERA SERIAL NUMBER IS SEVERELY BLOOMED. F.

F. THE LAST TITLED MASTER FRAME IS 1326 AND THE LAST TITLED SLAVE FRAME IS 1329.

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END OF MESSAGE